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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,212	08/18/2003	Toshio Yoshihara	DAIN:560A	2227
25944	7590	07/13/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			MCPHERSON, JOHN A	
			ART UNIT	PAPER NUMBER
			1756	
DATE MAILED: 07/13/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/642,212

Applicant(s)

YOSHIHARA ET AL.

Examiner

John A. McPherson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2004 and 30 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 53-60, 62 and 63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 51-60, 62 and 63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Office Action is responsive to the Amendment filed 12/29/04.
2. The Amendment filed 12/29/04 successfully overcomes the objections and rejections set forth in paragraphs 6-12 of the Office Action mailed 8/11/04. Accordingly, these rejections are withdrawn.

Allowable Subject Matter

3. The indicated allowability of claims 53-55, 58 and 59 is withdrawn. New ground of rejections are set forth below.

Claim Rejections - 35 USC § 112

4. Claims 53-60, 62 and 63 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 53 refers to "a pyrrolo[3,4-c]pyrrole derivative" in line 3, however it is unclear if the derivative of line 3 is a compound of formula (V) (as suggested by claim 53), or if this derivative is a compound of formula (VIII) produced in situ by thermal decomposition, photolysis, or chemical decomposition of a compound of formula (V) (as suggested by claim 62). Specifically, in claim 53 the pyrrolo[3,4-c]pyrrole derivative of line 3 is produced by converting at least one ketopyrrole group in a pyrrolo[3,4-c]pyrrolo

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of formula (I) to a compound of formula (V), which suggests that the “pyrrolo[3,4-c]pyrrole derivative” of claim 53, line 3 is a compound of formula (V). However, in claim 62, a pyrrolo[3,4-c]pyrrole of formula (VIII) is produced in situ from the pyrrolo[3,4-c]pyrrole derivative produced by converting a compound of formula (I) to a compound of formula (V), which suggests that the “pyrrolo[3,4-c]pyrrole derivative” of claim 53, line 3 may be a compound of formula (VIII), not formula (V). In summary, it is not clear which formula, which can all be considered pyrrolo[3,4-c]pyrrole derivatives, is intended to represent the derivative contained in the colored layer.

Claim 53 defines the variable “D” as a group of the formula (II), (III), or (IV) (see the forth page, lines 1-5 of the claim), however claim 53 also states that “D” may be hydrogen (see the seventh page, lines 6-7 of the claim). Defining a variable differently in the same claim makes the scope of the protection sought unclear.

Additionally, claim 62, as amended, state that the color layer further contains a coloring material of formula (VIII), however as the compound of formula (VIII) is produced from a compound of formula (I) which has been converted to a compound of formula (V), is unclear the compound of formula (VIII) is a further component of the color filter of claim 53 (i.e. a compound of formula (VIII) is present in addition to the pyrrolo[3,4-c]pyrrole derivative in the color filter), or if the compound of formula (VIII) is a species of the pyrrolo[3,4-c]pyrrole derivative generically referred to at claim 53, line 3 (i.e. not a further component, but a preferred embodiment of the pyrrolo[3,4-c]pyrrole derivative present in the color filter).

Claim Rejections - 35 USC § 102/103

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 53-60, 62 and 63 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 5,840,449 (US '449). US '449 discloses a pigment coating, useful as a color filter, comprising a pigment formed from a latent pigment, wherein the exemplified pigments includes a diketopyrrolo[3,4-c]pyrrole of formula (XVIb), which corresponds to the pyrrolo[3,4-c]pyrrole of formula (VIII) in the present invention (produced in situ from a pyrrolo[3,4-c]pyrrole derivative by converting a compound of formula (I) to a compound of formula (V)). See the abstract and column 20, line 65 to column 21, line 48.

Claim 62 is a product-by-process claim. The product of the prior art appears to be substantially identical to the product of the present invention because both products comprises the same pyrrolo[3,4-c]pyrrole pigment, although the pigments are produced by a different process (i.e. from different latent pigments). It has been held that when the prior art discloses a product which reasonably appears to be either identical or only

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slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable. *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972).

Furthermore, see MPEP 2113.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. McPherson whose telephone number is (571) 272-1386. The examiner can normally be reached on Monday through Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John A. McPherson
Primary Examiner
Art Unit 1756

JAM
7/11/05